

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 40-47, 49, 50, 53, 55, 57-76, and 79-82 are present in this application, claims 52, 54, 56, 77 and 78 being canceled and claims 79-82 being added by way of the present amendment. Claims 40-47, 49, 50 and 52-76 stand rejected under 35 U.S.C. §102(b) or, in the alternative, under 35 U.S.C. §103(a) over U.S. 5,318,916 (Enquist et al.), and claims 40-47, 49, 50 and 52-78 stand rejected under 35 U.S.C. 103(a) over U.S. 5,247,192 (Nii).

The Applicant greatly appreciates the discussion between their representative and Examiner Ngo on November 13, 2003. The above changes to the independent claims were discussed, and Examiner Ngo remarked that the amended claims may distinguish over the prior art of record, subject to reconsideration after submission of this amendment, and that the application is subject to an updated prior art search. It is respectfully submitted that the application is in condition for allowance, as will be described in detail below.

First, each of claims 40 and 57 recites a first active region having a first portion with a first width and a second portion with a second width smaller than said first width, a second active region having a third portion with a width substantially the same as the first width and fourth portion with a width smaller than the first width, and a third active region disposed between said first and second active regions having a width substantially the same as the first width. A non-limiting example of this structure is shown in figures 6 and 7. The claimed structure is not disclosed or suggested in Enquist et al., as the base layer 12 does not have the same width as collector mesa 70 and emitter mesa 20 (or 101). The pending claims are patentably distinguishable over Enquist et al.

The claimed structure is also not disclosed or suggested by Nii. In Nii, the collector region 2, base region 3 and emitter region 4 appear to have the same width. However, none of the regions have two portions where one portion has a width smaller than the other. The

nature of forming the regions in a trench in materials 5-7 and using materials 5-7 surrounding the trench to provide contacts to the regions clearly teaches away from a device with regions having two portions where one portion has a width smaller than the other. Such disclosure also clearly dissuades one skilled in the art from modifying the structure to include a region having two portions where one portion has a width smaller than the other. The pending claims are patenably distinguishable over Nii.

With regard to new claims 81 and 82, base region 3 in Nii is contacted on the edge by polysilicon film 6. This contact is not interior to an outer edge of base region 3. In the invention of claims 81 and 82, the contact to the third active region is interior to an outer edge of the third active region.

As the cited prior art does not disclose or suggest the claimed invention, it is respectfully submitted that the present application is in condition for allowance. A favorable decision to that effect is respectfully requested.

Respectfully submitted,

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